

Notice of Allowability

Application No.

10/690,138

Examiner

Fred M Teskin

Applicant(s)

SCHRECK ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
 2. ☒ The allowed claim(s) is/are 1-18.
 3. ☐ The drawings filed on _____ are accepted by the Examiner.
 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 070704
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Examiner's Amendment/Comment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 10, final line: --of ethylene-- has been inserted after "copolymer".

The amendment to claim 10 corrects an obvious omission and conforms the claim to the antecedent disclosure (e.g., page 4, lines 4-5, describing a long chain copolymer of *ethylene* and a substituted alkene).

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The primary reason for allowing the claims is that the prior art is not seen to teach or fairly suggest the manipulative steps of the claimed process for transitioning from a first polymerization reaction conducted in the presence of a first catalyst, to a second polymerization reaction conducted in the presence of a second catalyst, wherein the first and second catalyst are incompatible. In particular, the prior art fails to teach or suggest the claimed steps of "introducing and dispersing in the reactor an effective

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amount of a *non-volatile adsorbent* to deactivate the first catalyst [comprising a Ziegler-Natta catalyst] and substantially halt the first polymerization reaction; and ... introducing and dispersing in the reactor the second catalyst wherein the second catalyst comprises a MAO-based, single-site catalyst.” (Claim 1, subparagraphs (b) and (c); italics added.)

Of the prior art cited by applicants, Agapiou et al '019 is considered representative of the most pertinent prior art, as it discloses a process for transitioning between at least two incompatible catalysts/catalyst systems in a polymerization process wherein one of the catalysts may be a Ziegler-Natta type catalyst system and the other a metallocene-type catalyst system; and wherein an irreversible catalyst killer is introduced into the polymerization reactor following discontinuance of introduction of one catalyst system and prior to introduction into the reactor of the second catalyst system. Irreversible catalyst killers of the patentees' invention are said to include water, oxygen, alcohols, glycols and phenols, among numerous other possible choices (col. 5, lines 57+); however, water and oxygen are the only reversible catalyst killers utilized in the working examples. More significantly, the reference provides absolutely no guidance or direction to select from the generically mentioned alcoholic compounds, those compounds that would behave as a “non-volatile liquid under the conditions in the reactor” (per claim 7) nor any indication as to what amounts of “non-volatile adsorbent” would be effective in deactivating the Ziegler-Natta catalyst utilized in the first polymerization reaction, as required by claim 1.

Thus, Agapiou et al '019, whether taken alone or in combination with any other prior art of record, cannot be seen to disclose or fairly suggest the herein claimed subject matter as discussed above.

Upon conducting a thorough search and evaluation of the relevant art, examiner has not found the applicants' claimed process to be disclosed or fairly suggested in the prior art.

Accordingly, claims 1-18 are deemed to define allowable subject matter and are passed to issue.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information


Any inquiry concerning this communication should be directed to Examiner F. M. Teskin whose telephone number is (571) 272-1116. The examiner can normally be reached on Monday through Thursday from 7:00 AM - 4:30 PM, and can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached on (571) 272-1114. The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FRED TESKIN
PRIMARY EXAMINER
1713

FMTeskin/02-03-05